Prince Edward Island
Food Technology
Centre

PRINCE EDWARD ISLAND FOOD TECHNOLOGY CENTRE

1989 ANNUAL REPORT

Incorporated as
F.T.C. Enterprises Limited

CORPORATE MANDATE AND OBJECTIVES

MISSION STATEMENT

- The mandate of Prince Edward Island Food Technology Centre (F.T.C.) is **to elevate secondary processing and value-added activities within the agricultural and fisheries sectors of Prince Edward Island through provision of technical services. In addition, F.T.C. provides research and development leadership supporting innovation and integration of products, processes and technologies which enhance the competitiveness and capacity of Prince Edward Island's agricultural and fisheries sectors.**

OBJECTIVES

- to assist in the improvement of existing processes and technologies utilized by the food industries of P.E.I. through creation of opportunities for the exploitation of state-of-the-art food technologies;

- to work with the available resources of the agricultural and fisheries sectors to develop new opportunities and marketable products specific to P.E.I;

- to identify, transfer and integrate domestic and distant food processing technologies to the P.E.I. agricultural and fish processing sector;

- to develop food products and processing technologies which incorporate:

  a) value-added product opportunities,
  b) available, unexploited and underutilized sources of raw materials,
  c) by-products of agriculture, fish processing and aquaculture activities;

- to initiate and execute pro-active research and development projects relating to food processing technologies.

- to provide specific technical information and extension services to assist P.E.I. industry in innovation, development and improvement of food production and processing strategies;

EXECUTIVE DIRECTOR'S MESSAGE

No other province in the Atlantic region depends upon its agricultural and fisheries sectors, as does Prince Edward Island. The high visibility of these sectors, in the face of a dependence upon products which are not optimally value-added, promises a long-term role for the P.E.I. Food Technology Centre in the community. FTC recognizes that its success will be determined by the integration of its activities into the P.E.I. economy.

Today, rapidly growing market segments are effectively controlled by the consumer. Increased international travel, higher levels of education, product awareness, and an elevated ethnic input into the economy have resulted in a need for more adventurous foods. A net effect is that consumers have developed high expectations for the food supply on the basis of freshness, quality, convenience, health aspects, portion control, value for money, and ready-to-serve attributes. In an effort to penetrate niches and seize opportunities created by diversified consumer demand, F.T.C. is focusing on opportunities which lie in specialty sector products, maximizing value-added options. Examples include closed-shell mussel processing, modified atmosphere packaged vegetables, gourmet pack potatoes, and sculptured potato products.

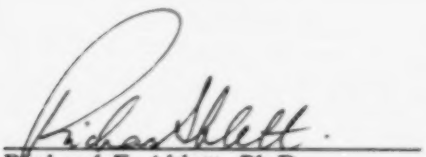
As agricultural trends shift, it is increasingly important that Island farmers are provided with technical assistance that will keep them competitive in world markets. FTC is committed to establishing: "primary production-secondary processing" bridges within the existing agri-sector; new and alternative product options derived from agricultural production; introduction of new processing technologies including "modified atmosphere packaging" and "sous vide" techniques to access distant and specialized market opportunities; and a focused forum for commodity sectors seeking a more aggressive and innovative competitive edge to gain and improve their market position.

In terms of the fishery, F.T.C. efforts have been directed to by-product utilization, fish processing efficiency improvements, and product development. Aquaculture represents a positive growth area in the PEI fishery and this trend should continue through the 1990's. The advantages of aquaculture species are clearly apparent in fulfilling specialty niche markets associated with high quality and unique characteristics which exploit the resource capacity of the Atlantic region. F.T.C will have strong in-house capabilities to conduct storage stability studies and product development work for the P.E.I. fishing and aquaculture industry.

To date, F.T.C. has assisted 40 percent of Island processors and currently is involved with twenty (20) active projects. Success for the Centre will depend upon establishing a balanced profile of industry-responsive and pro-active development projects embracing advanced and traditional technologies centered over a range of food resources. A flexible base of activities, all hinging on core principles of food science and technology, will enable F.T.C. to respond to food analysis issues, economic development issues and leading edge research and development needs.

On April 14, 1989 the first sod will be turned for the construction of the new 15,000 sq. ft. facility on the campus of the University of Prince Edward Island. The new P.E.I. Food Technology Centre has been designed to include analytical laboratories, a product development laboratory, a development and research pilot plant, an information and resource section, and technical and support office space. A scientific laboratory, featuring state-of-the-art equipment and expertise to provide reactive technical response and pro-active experimental laboratory developments, will promote growth in the Island's food industry. The Prince Edward Island Food Technology Centre will have the capacity to offer a complete service to its clients incorporating the development of new products and processes, analysis of existing products and processes, and the assurance of quality and safety in all Island processed commodities. Following construction of the Centre, staffing will be expanded to include an active food technology section with support technical staff and a pilot plant manager.

The Prince Edward Island Food Technology Centre is poised to assume a vital and leading role in the growth of the Prince Edward Island economy. The completion of the new facility will enable the P.E.I. Food Technology Centre to assume that leading role.



Richard F. Ablett, Ph.D.
Executive Director

FTC SERVICES

During the 1988-89 fiscal year the structure of the P.E.I. Food Technology Centre was reviewed. Decisions were made to remain as a Part I company and a wholly-owned subsidiary of the Prince Edward Island Development Agency. In January, 1989 a new Board of Directors was established consisting of a private sector Chairman, three public sector members, two academic members, and three private sector members representing the agricultural, fisheries, and industrial sectors.

FTC delivers its mission through four Divisions within the Centre:

Industrial Interaction Division is responsible for executing projects arising from the needs of Island processors as well as pro-active initiatives including technology acquisition and transfer. This Division also assists in accessing funding from other government sources for both clients and FTC, serving to amplify the effectiveness of FTC's provincial operating budget. During 1988-89, the Centre received $143,850 in project recovery for completed projects with another $58,100 received on projects ongoing into the next fiscal year.

Development Initiatives Division is responsible for pro-active research and development projects attending commodity-related and food technological innovations of generic benefit to the Island's agriculture and fisheries sectors. This group also provides technical support to the Industrial Interaction Division.

Information and Resource Division is responsible for technical intelligence gathering in support of the technical staff as well as public relations outflow and technical information services for industry and the public. Efforts are presently being directed to rationalize and develop the Information and Resource Division of FTC to ensure an adequate level of public relations outflow in the coming months. To date, this division has been dedicated primarily towards information in-flow activities.

Administration Division provides management, financial and secretarial support services.

To date, the total staffing of the Centre is 17 full-time personnel comprised of 12 technical and five administrative staff members. In addition, one part-time project technologist is affiliated with the Centre.

Over the last twelve month period, 42 projects have been initiated within the following categories of activities:

a) **food products** - assistance provided to clients in the formulation and testing of new food products with special attention to quality, stability and appearance.

b) **food processes** - assistance provided to clients in the development and refinement of production procedures, the selection of appropriate technology and equipment, and the implementation of changes or improvements, e.g. Modified Atmosphere Packaging of small fruits and vegetables.

c) **technology transfers and integration** - projects in this category involve the identification and procurement of process technologies available from other regions, either in response to a particular client need or the potential for technological advancement of the Island food processing sector. When required, the F.T.C. assists the processor with all aspects of the implementation of the new technology, e.g. establishment of a new Island business based on the combined operation of sculptured potato products and stuffed baked potatoes.

d) **research and development** - projects categorized under R & D generally involve longer term scientific evaluation and analysis of subjects which are perceived to have future (more generic) benefit to the Island food processing sector, e.g. tissue culture of low-bush blueberry varieties.

e) **trouble-shooting** - assistance is provided to the client in dealing with immediate processing difficulties encountered either in an established operation or during the implementation of a new product line or process, e.g. evaluation of in-plant atmospheric conditions in a slaughterhouse.

f) **on-going operational services** - the assistance provided under this category includes the provision of technical information and support, production support and training of staff, e.g. nutritional labelling and methods of pizza production.

g) **establishment of new operations** - clients are provided the necessary technical support for the development of new processing operations. Support would include provision of necessary technical input to business plans and funding applications.

Examples of FTC activity in the various sectors during the 1988-89 fiscal year include:

<u>Agriculture Sector</u>

- Modified atmosphere packaging of small fruits and vegetables
- Packaging technologies for potatoes
- Drying technologies for manufacture of feeds from waste potatoes
- Cleaning technologies and equipment for dried herbs
- Dry-cleaning of round white potatoes
- Quality evaluations and laboratory analysis of potatoes
- Blueberry tissue culture
- Quality evaluations of value-added products

Fisheries Sector

- Organoleptic evaluations of seafood products
- Animal feed additives from shellfish waste
- Fish silage for fox feeds
- Package technologies for fish products
- Value-added fish products
- Shelf-stability analysis of fish and shellfish products

CONSTRUCTION OF NEW FACILITY

Following satisfactory negotiations with the Atlantic Canada Opportunities Agency for a capital grant of $2.5 million for construction of a new food technology centre, architects were engaged to design a building to meet the anticipated needs of the organization. Tenders were called and contracts were awarded to the lowest bidders. The general construction tender was awarded to Williams, Murphy & MacLeod Ltd. of Charlottetown, the electrical subcontract was awarded to Univex Canada Ltd. of Ottawa, and the mechanical subcontract was awarded to Steen Contractors Ltd. of Charlottetown. Construction will begin as soon as conditions permit in early spring, 1989 with an expected completion date of September-October, 1989.

The building, of masonry construction, will cover approximately 15,000 sq. ft. and will consist of analytical laboratories, a pilot plant, a product development laboratory, library, and offices.

The pilot plant will provide controlled refrigeration and freezer storage and will accommodate the development of new products and processes. The laboratories will be equipped for microbiological and chemical analysis, food quality and safety programs and basic research, utilizing a wide array of state-of-the-art scientific instruments, with on-line data management and statistical analysis. The product development laboratory and pilot plant facilities will allow the industry to develop and improve product lines, while also monitoring sensory parameters through use of computerized analysis.

To date, the Centre has functioned as an office-based operation with the ability to deliver laboratory and pilot plant services through subcontract to sister agencies in other provinces. The permanent facility will augment the capacity of the centre to deliver full service to industry on an in-house basis. It is expected that this will result in an increased efficiency of operation with faster response time and a decrease in the cost of service to industry.

AFFILIATIONS

UNIVERSITY OF PRINCE EDWARD ISLAND AND HOLLAND COLLEGE

The Centre has been negotiating a Memorandum of Understanding which will establish a formal affiliation with the University of Prince Edward Island. Affiliation with the University will provide the Centre with access to scientific expertise and facilities in areas of biology, chemistry, physics, engineering and home economics. In particular, the Atlantic Veterinary College on the campus of U.P.E.I. will provide a supportive physical and intellectual environment for a centre devoted to proactive research and development for the benefit of the Island's food industry.

A close association with the Holland College Culinary Institute and the Holland College Technology Centre, including the Food and Fisheries Technology Programs, will contribute to the development of an essential "critical mass" from which the P.E.I. Food Technology Centre can grow to comprehensively serve the needs of the Island food sector. The Food Technology Centre has been able to access the comprehensive analytical capabilities of the College and it is perceived that continued interaction greatly reduces necessity for acquisition of very specialized pieces of laboratory equipment.

NATIONAL RESEARCH COUNCIL

The National Research Council has funded numerous projects for the clients of the P.E.I. Food Technology Centre through the Industrial Research Assistance Program (IRAP), which supports technical assistance and long term research projects. As a recipient of a Contribution Agreement, the Centre enhances its ability to work with the food processing industry through the employment of a dedicated Industrial Technology Advisor. The ITA provides access to the IRAP programs inclusive of personal assistance and information networking.

ATLANTIC FOOD RESEARCH AND DEVELOPMENT ASSOCIATION

On March 2, 1989, the first meeting of AFRADA was held with the heads of the major research institutes in the Atlantic provinces. AFRADA is an informal forum for information exchange. Its purpose is to communicate effectively without concern for duplication, to collaborate in development areas of mutual benefit, and to represent the Atlantic region nationally as a single group on matters of common interest.

TECHNICAL SUPPORT

Because F.T.C. has functioned primarily as an office operation, it has been necessary to obtain technical assistance and in some cases to subcontract technical services to sister agencies including:

- Technical University of Nova Scotia, N.S.
- Ontario Centre for Farm Machinery & Food Processing, ON
- Nova Scotia Agricultural College, N.S.
- St. Hyacinthe, Agriculture Canada, PQ
- University of Guelph, ON
- Holland College, P.E.I.
- Campden Food Preservation & Research Association, U.K.
- Nova Scotia Research Foundation, N.S.
- Canadian Food Products Development Centre, Man.
- Leatherhead Food Research Association, U.K.

F.T.C. ENTERPRISES LIMITED

FINANCIAL STATEMENTS
FOR THE YEAR ENDED
MARCH 31, 1989

AUDITORS' REPORT TO THE SHAREHOLDERS

We have examined the balance sheet of F.T.C. Enterprises Limited as at March 31, 1989 and the statements of income and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company as at March 31, 1989 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Coopers & Lybrand

CHARTERED ACCOUNTANTS

BALANCE SHEET AS AT MARCH 31, 1989

ASSETS

	1989 $	1988 $
CURRENT ASSETS		
Cash and short-term deposits	1,488,251	155,339
Accounts receivable	106,077	15,908
	1,594,328	171,247
GRANT RECEIVABLE	93,447	-
FIXED ASSETS (note 3)	447,407	41,988
	2,135,182	213,235

LIABILITIES

CURRENT LIABILITIES		
Accounts payable and accrued liabilities	192,252	47,350
Holdbacks payable	29,199	-
Deferred revenue	58,120	-
	279,571	47,350
DEFERRED CREDIT	934,471	-
	1,214,042	47,350

SHAREHOLDERS' EQUITY

CAPITAL STOCK (note 5)	100	100
CONTRIBUTED SURPLUS	921,040	165,785
	921,140	165,885
	2,135,182	213,235

SIGNED ON BEHALF OF THE BOARD

Director

Director

STATEMENT OF INCOME
FOR THE YEAR ENDED MARCH 31, 1989

	1989 $	1988 $
REVENUE		
Grants - Province of Prince Edward Island (note 7)	697,345	445,037
- National Research Council	46,980	13,597
Project recoveries	143,850	36,509
Other	21,212	26
	909,387	495,169
EXPENSES		
Salaries and benefits	477,657	263,517
Project costs	188,013	62,479
Office and field supplies	18,625	17,647
Telecommunications	27,427	15,771
Rent and occupancy costs	26,216	14,597
General administration	9,279	4,105
Printing	5,963	20,173
Advertising and promotion	3,048	6,695
Publications	17,063	10,323
Professional fees	29,228	14,205
Travel and training	67,459	50,053
Depreciation	39,409	15,604
	909,387	495,169
EXCESS REVENUE FOR THE YEAR	-	-

STATEMENT OF CHANGES IN FINANCIAL POSITION
FOR THE YEAR ENDED MARCH 31, 1989

	1989 $	1988 $
OPERATING ACTIVITIES		
Excess revenue for the year	-	-
Item not affecting cash -		
Depreciation	39,409	15,604
	39,409	15,604
Net decrease in non-cash working capital balances related to operations	142,052	31,442
	181,461	47,046
INVESTING ACTIVITIES		
Increase in grant receivable	(93,447)	-
Purchase of fixed assets	(444,828)	(57,592)
	(538,275)	(57,592)
FINANCING ACTIVITIES		
Increase in deferred credit	934,471	-
Issuance of capital stock	-	100
Increase in contributed surplus	755,255	165,785
	1,689,726	165,885
INCREASE IN CASH	1,332,912	155,339
CASH- BEGINNING OF YEAR	155,339	-
CASH - END OF YEAR	1,488,251	155,339

NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED MARCH 31, 1989

1. ACCOUNTING POLICIES

The financial statements of the company have been prepared in accordance with generally accepted accounting principles. The following is a summary of significant accounting policies used in the preparation of these financial statements.

Depreciation

Depreciation of fixed assets is calculated using the straight-line method at the annual rate of 33-1/3% for computer and 20% for furniture and equipment. A full year's depreciation is taken in the year of acquisition. No depreciation has been taken on the building under construction.

Deferred Credit

The company has adopted the policy that contributions from Atlantic Canada Opportunities Agency towards the acquisition of fixed assets will be deferred and amortized to income on the same basis as the related fixed assets are to be depreciated.

Revenue

The company follows the percentage completion method of accounting for revenue and expenditures on project contracts. The percentage of completion method records the company's estimated profit based on the expenditures incurred and work completed on each contract in progress.

2. CORPORATE STATUS

The company is a wholly-owned subsidiary of a crown corporation, the Prince Edward Island Development Agency.

3. FIXED ASSETS

	1989			1988
	Cost	Accum. Deprec.	Net	Net
	$	$	$	$
Building under construction	353,645	-	353,645	-
Computer	72,403	34,350	38,053	19,534
Furniture and equipment	76,372	20,663	55,709	22,454
	502,420	55,013	447,407	41,988

4. LEASE

The company has entered into a twenty-five year lease with the University of Prince Edward Island for the lease of land upon which the corporation is constructing its new facilities. The lease cost is $1 per year and is renewable for a further term of twenty-five years for the same annual consideration.

5. CAPITAL STOCK

	1989 $	1988 $
Authorized, issued and fully paid		
100 common shares of the par value of $1 each	100	100

6. COMMITMENTS

During the year the company commenced construction of a new facility on the campus of the University of Prince Edward Island at an estimated total cost of $3,400,000. Total expenditures incurred to March 31, 1989 were $419,000. The company obtained an Atlantic Canada Opportunities Agency grant to a maximum of $2,500,000, to be received in accordance with the terms of the agreement, and has received an additional $900,000 from its parent company in the form of contributed surplus to assist in financing the facility.

7. GRANTS FROM THE PROVINCE OF PRINCE EDWARD ISLAND

	1989 $	1988 $
Operating	697,345	445,037
Contributed Surplus	755,255	155,063
	1,452,600	600,100

BUSINESSES ASSISTED

Mid-Isle Farms
Eric C. Robinson Inc.
Gorman Controls Ltd.
Perfection Foods Ltd.
C & L Seafoods (Canada) Inc.
England Fur Farms Limited
Beinn Mara Apiaries
Atlantic Isle Gourmet Pasta
Summer's Bounty
Garden Province Meats
P.E.I. Potato Chip Cooperative
Health Pasteurized Milk Co.
Little Christo's Pizzeria
Belle River Enterprises
Amalgamated Dairies Limited
Island Saltfish Company
Prestige Farms Limited
Souris Buttercup Dairy
Victoria Seafoods Inc.
Westech Agriculture Limited
Montgomery's Summer Savory

ASSOCIATIONS AND GOVERNMENT AGENCIES ASSISTED

P.E.I. Dept. of Agriculture
P.E.I. Dept. of Energy & Forestry
P.E.I. Dept. of Fisheries
P.E.I. Development Agency
P.E.I. Horticultural Assn.
P.E.I. Blueberry Growers Association
P.E.I. Cultured Mussel Growers Assn.

CORPORATE DIRECTORY

BOARD OF DIRECTORS

George Wright, Sherwood
Chairman

Michael S. Kelly, Sherwood
Deputy Minister of Industry and
C.E.O. of P.E.I. Development Agency

Andrew Wells, Hunter River
Secretary to Treasury Board

Dale Dewar, New Perth
Deputy Minister of Agriculture

Keith Wornell, Charlottetown
Secretary to Policy Board

Doug Johnston, Brudenell
Deputy Minister of Fisheries

Dale Landry, Bunbury
President, Holland College

Lawson Drake, Meadowbank
Dean of Science, University
of Prince Edward Island

Kenneth MacDonald, Roseneath
President, Wendell Graham
(1981) Ltd.

Rod Nicholson, Winsloe
General Manager, Mid-Isle Farms

Grant Grady, Wilmot
Production Supervisor - Quality
Control, Amalgamated Dairies Ltd.

Richard F. Ablett, Hazel Grove (ex-officio)
Executive Director of P.E.I. Food Technology Centre

J. Reagh Hicken, Southport (ex-officio)
Controller of P.E.I. Development Agency

OFFICERS

Chairman of the Board, George D. Wright
Vice Chairman/Treasurer, Michael S. Kelly
Secretary/Executive Director, Richard F. Ablett
Controller, Brenda Tremere
Project Coordinator, Colin R. Marr

AUDITORS

Coopers & Lybrand

BANKER

Bank of Montreal

SOLICITORS

Scales, Jenkins & McQuaid